

MATERIAL SAFETY DATA SHEET

SAND
CAROLINA BIOLOGICAL

Revised: 09/05/00
Replaces: None
Printed: 07/08/06

PRODUCT IDENTIFICATION

PRODUCT NAME: SAND
COMMON SYNONYMS: SILICON DIOXIDE
CHEMICAL FAMILY: SILICON COMPOUNDS
FORMULA: SiO2
FORMULA WT.: 60.00
CAS NO.: 14808-60-7
NIOSH/RTECS NO.: VV7330000
PRODUCT USE: LABORATORY REAGENT
PRODUCT CODES: 7023,3382

CHEMTREC # (800) 424-9300 NATIONAL RESPONSE CENTER # (800) 424-8802
J.T.BAKER INC. 222 RED SCHOOL LANE PHILLIPSBURG, NJ 08865 24-HOUR
EMERGENCY TELEPHONE -- (201) 859-2151

EFFECTIVE: 01/04/94 ISSUED: 04/08/95
REVISION #04

PRECAUTIONARY LABELING

BAKER SAF-T-DATA* SYSTEM

HEALTH	-	3	SEVERE (CANCER CAUSING)
FLAMMABILITY	-	0	NONE
REACTIVITY	-	0	NONE
CONTACT	-	0	NONE

LABORATORY PROTECTIVE EQUIPMENT

GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

U.S. PRECAUTIONARY LABELING

WARNING

NOTE: REPORTED AS CAUSING CANCER IN LABORATORY ANIMALS. EXERCISE DUE CARE.

DURING USE AVOID CONTACT WITH EYES, SKIN, CLOTHING. WASH THOROUGHLY AFTER

HANDLING. WHEN NOT IN USE KEEP IN TIGHTLY CLOSED CONTAINER.

INTERNATIONAL LABELING

DO NOT BREATHE DUST.

SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

COMPONENTS

COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL
ACGIH/TLV SILICON DIOXIDE MG/M	14808-60-7	90-100	0.1 MG/M 0.1

THE TLV AND PEL FOR SILICON DIOXIDE ARE LISTED UNDER SILICA - CRYSTALLINE, QUARTZ, RESPIRABLE DUST.

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PHYSICAL DATA

BOILING POINT: 2230 C (4046 F) VAPOR PRESSURE (MMHG): N/A
(AT 760 MM HG)

MELTING POINT: 1710 C (3110 F) VAPOR DENSITY (AIR=1): N/A
(AT 760 MM HG)

SPECIFIC GRAVITY: 2.65 EVAPORATION RATE: N/A
(H2O=1)

SOLUBILITY(H2O): NEGLIGIBLE (<0.1%) % VOLATILES BY VOLUME: 0
(21 C)

PH: N/A

ODOR THRESHOLD (P.P.M.): N/A PHYSICAL STATE: SOLID

COEFFICIENT WATER/OIL DISTRIBUTION: N/A

APPEARANCE & ODOR: CRYSTALLINE POWDER. ODORLESS.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP): N/A

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: UPPER - N/A LOWER - N/A

FIRE EXTINGUISHING MEDIA
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES
NONE IDENTIFIED.

UNUSUAL FIRE & EXPLOSION HAZARDS
NONE IDENTIFIED.

TOXIC GASES PRODUCED
NONE IDENTIFIED

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT
NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE
NONE IDENTIFIED.

HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): 0.1 MG/M

THE TLV FOR SILICON DIOXIDE IS LISTED UNDER SILICA - CRYSTALLINE,
QUARTZ,
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SHORT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED

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PERMISSIBLE EXPOSURE LIMIT (PEL): 0.1 MG/M

THE PEL FOR SILICON DIOXIDE IS LISTED UNDER SILICA, CRYSTALLINE QUARTZ,
RESPIRABLE DUST.

TOXICITY OF COMPONENTS

INHALATION HUMAN LCLO SILICON DIOXIDE OY-I	300
INTRAVENOUS RAT, LDLO FOR SILICON DIOXIDE MG/KG	90
INTRAVENOUS MOUSE LDLO SILICON DIOXIDE MG/KG	40

CARCINOGENICITY: NTP: NO IARC: YES Z LIST: NO OSHA REG: NO

CARCINOGENICITY

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) CLASSIFIED
CRYSTALLINE SILICA IN GROUP 2A, "PROBABLY CARCINOGENIC TO HUMANS."

REPRODUCTIVE EFFECTS

NONE IDENTIFIED.

EFFECTS OF OVEREXPOSURE

INHALATION: EXCESSIVE INHALATION MAY CAUSE FIBROSIS OF THE
LUNGS

SKIN CONTACT: NONE IDENTIFIED

EYE CONTACT: NONE IDENTIFIED

SKIN ABSORPTION: NONE IDENTIFIED

INGESTION: NONE IDENTIFIED

CHRONIC EFFECTS: NONE IDENTIFIED

TARGET ORGANS

RESPIRATORY SYSTEM, LUNGS

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY

INHALATION

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY
GIVE
LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.

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INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE
EXPOSED PERSON TO FRESH AIR.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH PLENTY
OF SOAP AND WATER FOR AT LEAST 15 MINUTES.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY
OF WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO

CERCLA HAZARDOUS SUBSTANCE: NO

SARA 313 TOXIC CHEMICALS: NO

TSCA INVENTORY: YES

STATE LISTS: FOR PRODUCTS SOLD IN THE STATE OF CALIFORNIA, THE STATE
REQUIRES

THAT WE PROVIDE TO USERS AND THEIR EMPLOYEES THE FOLLOWING MESSAGE:

WARNING:

THIS PRODUCT IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE
CANCER.

REACTIVITY DATA

STABILITY: STABLE
OCCUR

HAZARDOUS POLYMERIZATION: WILL NOT

CONDITIONS TO AVOID: NONE DOCUMENTED

INCOMPATIBLES: NONE IDENTIFIED

DECOMPOSITION PRODUCTS: NONE IDENTIFIED

SPILL & DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE

WEAR SUITABLE PROTECTIVE CLOTHING. CAREFULLY SWEEP UP AND REMOVE.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL
ENVIRONMENTAL REGULATIONS.

INDUSTRIAL PROTECTIVE EQUIPMENT

VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET
TLV REQUIREMENTS.

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE
TO 2 CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS UP

ABOVE

PPM, A DUST/MIST RESPIRATOR IS RECOMMENDED.

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THIS LEVEL, A SELF-CONTAINED BREATHING APPARATUS
IS ADVISED.

EYE/SKIN PROTECTION: SAFETY GOGGLES, PROPER GLOVES ARE RECOMMENDED.

STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL
STORAGE AREA.

TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 2505900007

NOTE: WHEN HANDLING LIQUID PRODUCTS, SECONDARY PROTECTIVE CONTAINERS MUST BE USED FOR CARRYING. N/A = NOT APPLICABLE, OR NOT AVAILABLE N/E = NOT ESTABLISHED. THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (29 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PERSON TRAINED IN, OR SUPERVISED BY A PERSON TRAINED IN, CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION. DEPENDING ON USAGE, PROTECTIVE CLOTHING INCLUDING EYE AND FACE GUARDS AND RESPIRATORS MUST BE USED TO AVOID CONTACT WITH MATERIAL OR BREATHING CHEMICAL VAPORS/FUMES. EXPOSURE TO THIS PRODUCT MAY HAVE SERIOUS ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES ARE SO VARIED, BAKER CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE OR INTERACTION WITH OTHER CHEMICALS OR MATERIALS. BAKER WARRANTS THAT THE CHEMICAL MEETS THE SPECIFICATIONS SET FORTH ON THE LABEL. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE. THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEeded. READ ALL PRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAFETY INFORMATION BECOMES

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